

Smart Aligner – AGL Measurements Course



MultiWave Sensors

Topics Covered

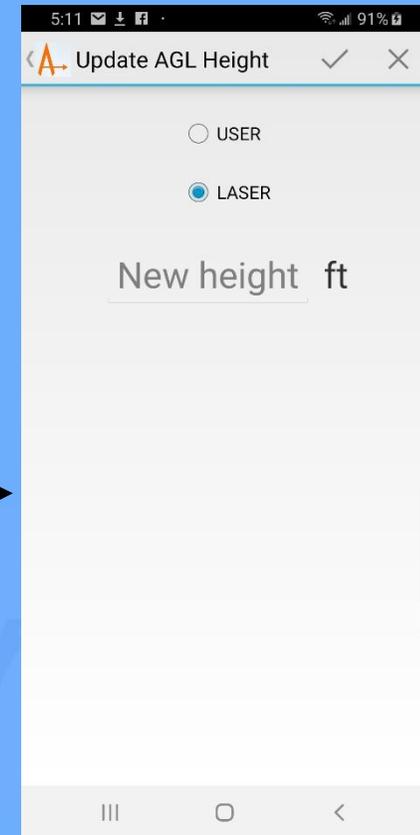
Note: This training course assumes that the Introductory Course has been completed and the user is familiar with the basic operation of the Smart Aligner System.

1. Tape Drop AGL Measurements: Slides 3 - 7
2. Laser AGL with Cable: Slides 6 - 9
3. Laser AGL with Bluetooth: Slides 10 - 16



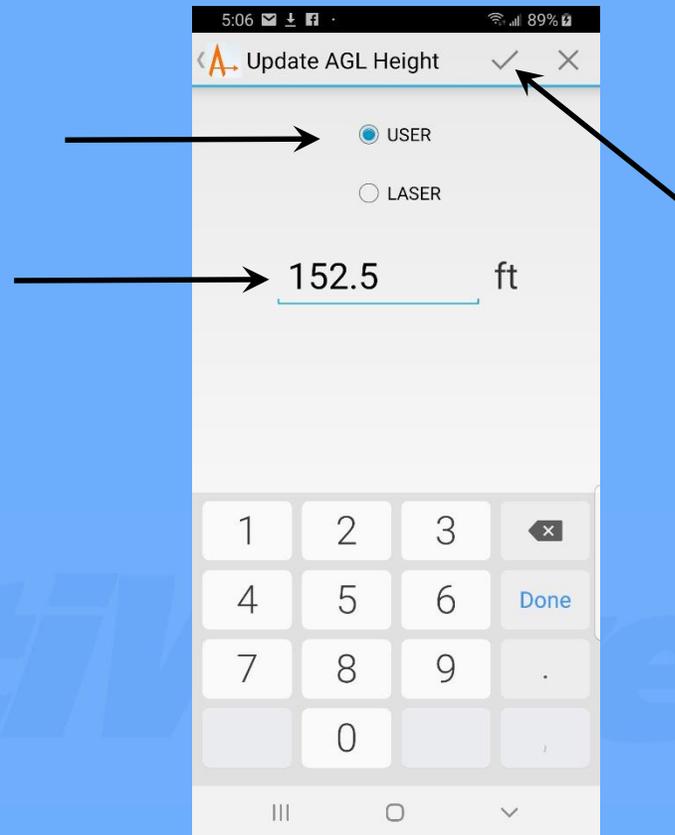
Tape Drop AGL Measurements

1. Make the tape drop measurement as normal.
2. Align and Verify the antenna. Take photo of tape.
3. Scroll to the bottom of the Measurement Results.
4. Tap 0.0m(LASER).



Tape Drop AGL Measurements

5. Select *USER*.
6. Enter the distance using the keypad.
7. Select checkmark (*Save* in iOS)



Tape Drop AGL Measurements

8. You will return back to the Antenna Details screen.
9. The AGL Height will be displayed as entered. (USER denotes that the AGL was manually entered).



Laser AGL with Cable

1. The Smart Aligner tool is designed to work with the TruPulse 200 Laser made by Laser Technology, Inc. This section deals with using the optional TruPulse Laser and optional Laser AGL Cable.
2. It is recommended to familiarize yourself with the use of the Laser before climbing. If you are using a new Laser, make sure that the batteries are installed.



Laser AGL with Cable

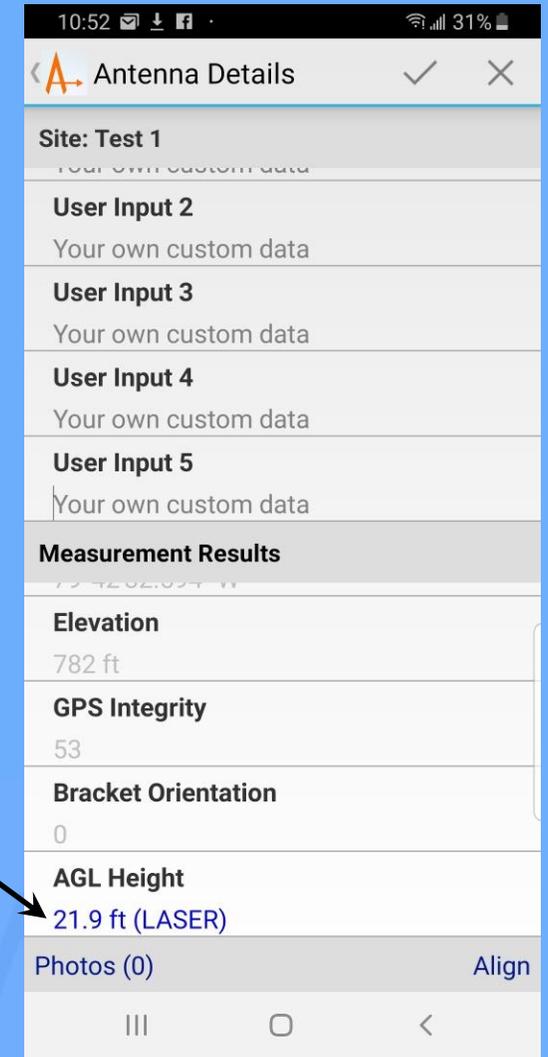
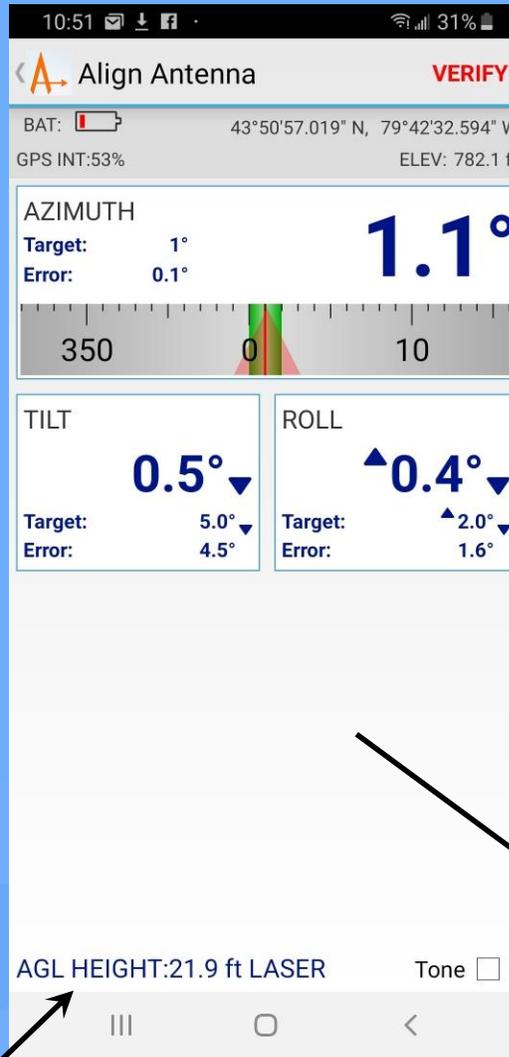
3. Connect one end of the Laser AGL Cable to the Tool's Data Port and the other end to the TruPulse 200.



4. Hold the Laser at mid-height of the antenna and aim to the ground. The Laser does not have to be perfectly vertical, but it has to measure to an area at the same approximate elevation as the base of the tower.

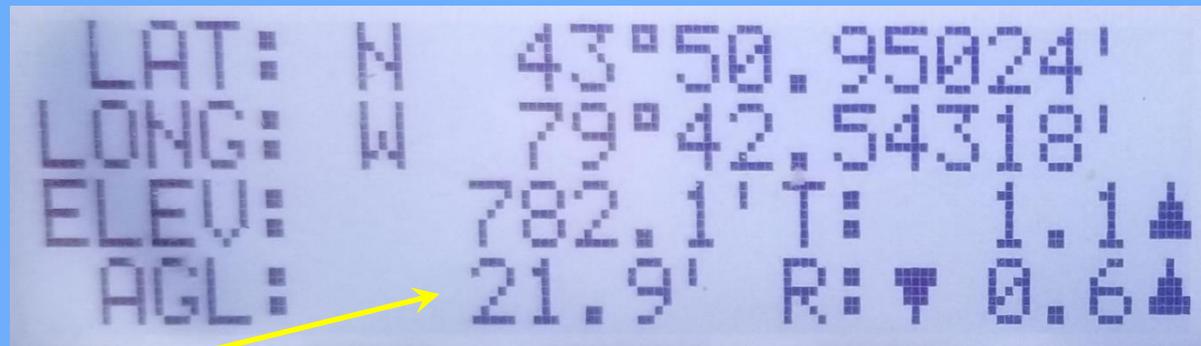
Laser AGL with Cable

5. Take the laser measurement when you are in the Measurement Screen of the app. The vertical distance of the measurement should appear in the lower left corner. Once Verified, the AGL Height is shown in the Measurement Results as 21.9ft (LASER). LASER means that it is automatically generated by the laser.



Laser AGL with Cable

- The AGL measurement will only appear in the Position Measurement Screen of the Tool if the AGL Cable is used. If a Bluetooth Laser is used (next section), the measurement goes directly to the app; thus, it will not be shown on the Tool's Position Information Screen as follows:



AGL - Above Ground Level

Laser AGL with Bluetooth (BT)

1. The Smart Aligner tool is designed to work with the TruPulse 200 Laser made by Laser Technology, Inc. This section deals with using the TruPulse BT Laser (no Laser AGL Cable required). **Note: The TruPulse 200 BT Laser will not work wirelessly with the iOS (Apple) app. Please see the previous Laser AGL with Cable section.**
2. It is recommended to familiarize yourself with the use of the Laser before climbing. If you are using a new Laser, make sure that the batteries are installed.



Laser AGL with Bluetooth (BT)

3. Make sure that the BT is activated on the Laser. To do this, press and hold the Down Arrow until the Menu says *Units*. Press the Down Arrow again to see *bt*. Press the Fire Button. If the response is *bt_on* then press the Fire Button again. If it doesn't say *bt_on*, then press the Down Arrow until it appears, then press the Fire Button.

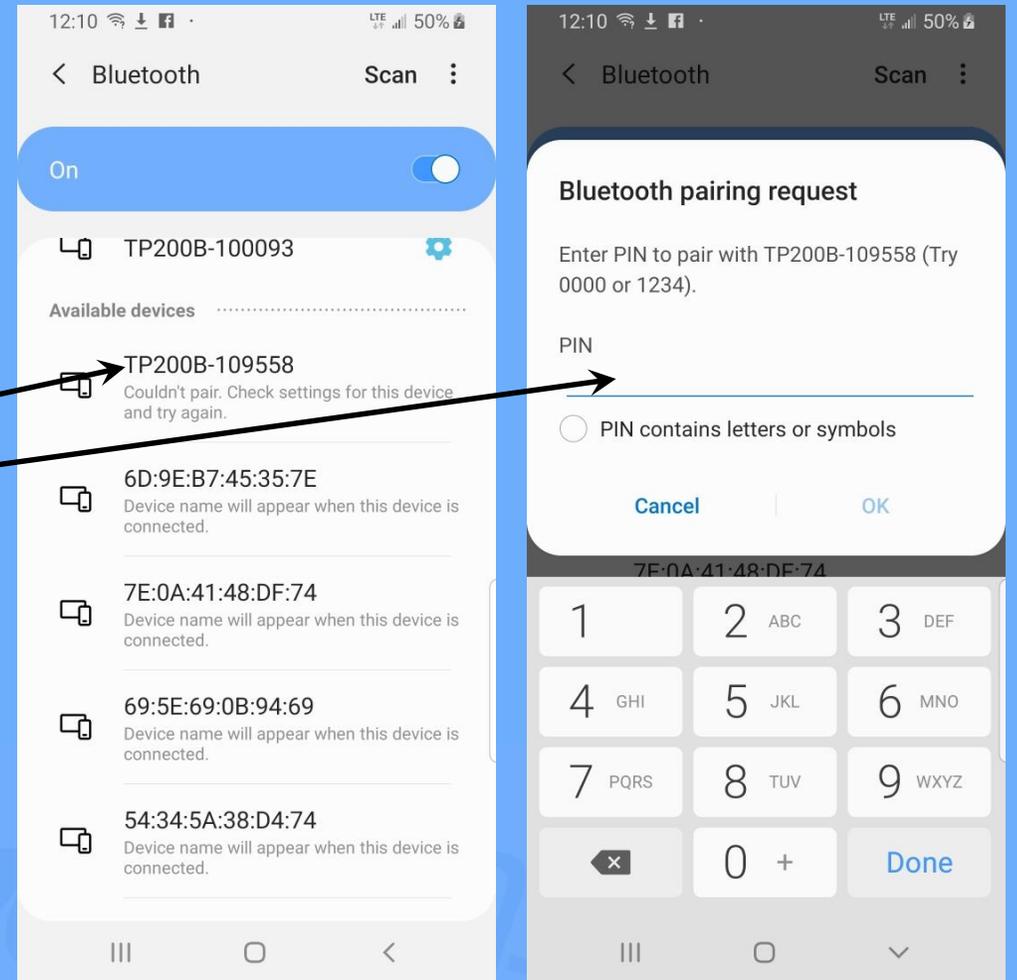


Fire Button

Down Arrow

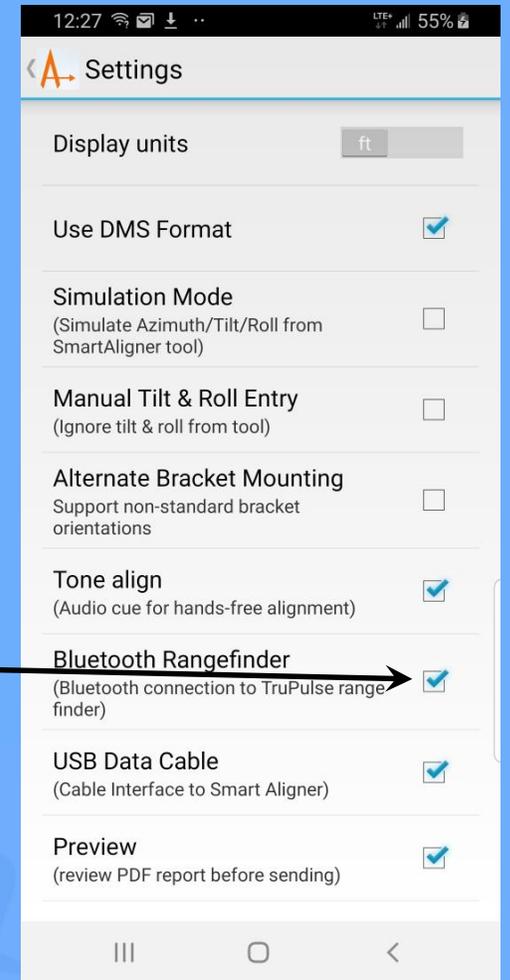
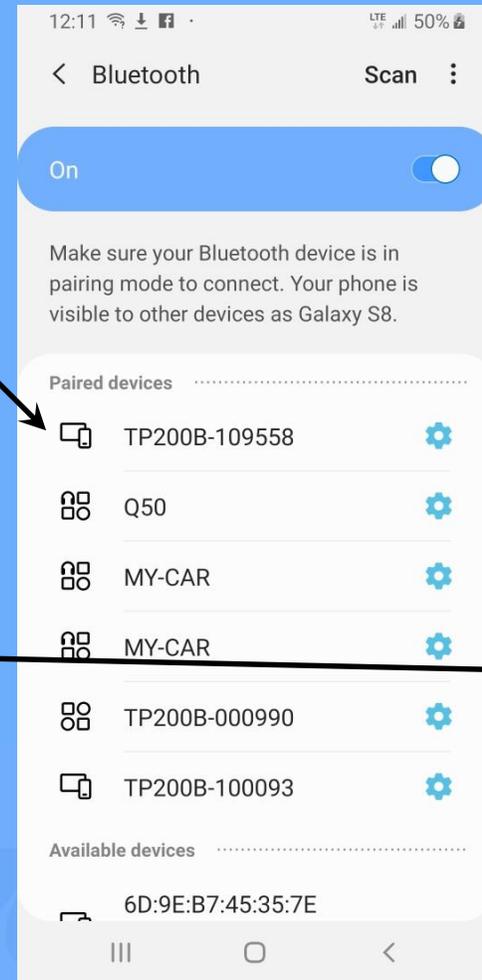
Laser AGL with Bluetooth (BT)

4. Go to Settings on the phone and choose Bluetooth. Turn on Laser by pressing the Fire Button. The TruPulse should show up in the Available Devices as TP200B- (serial number). Tap it.
5. Enter PIN 1111.



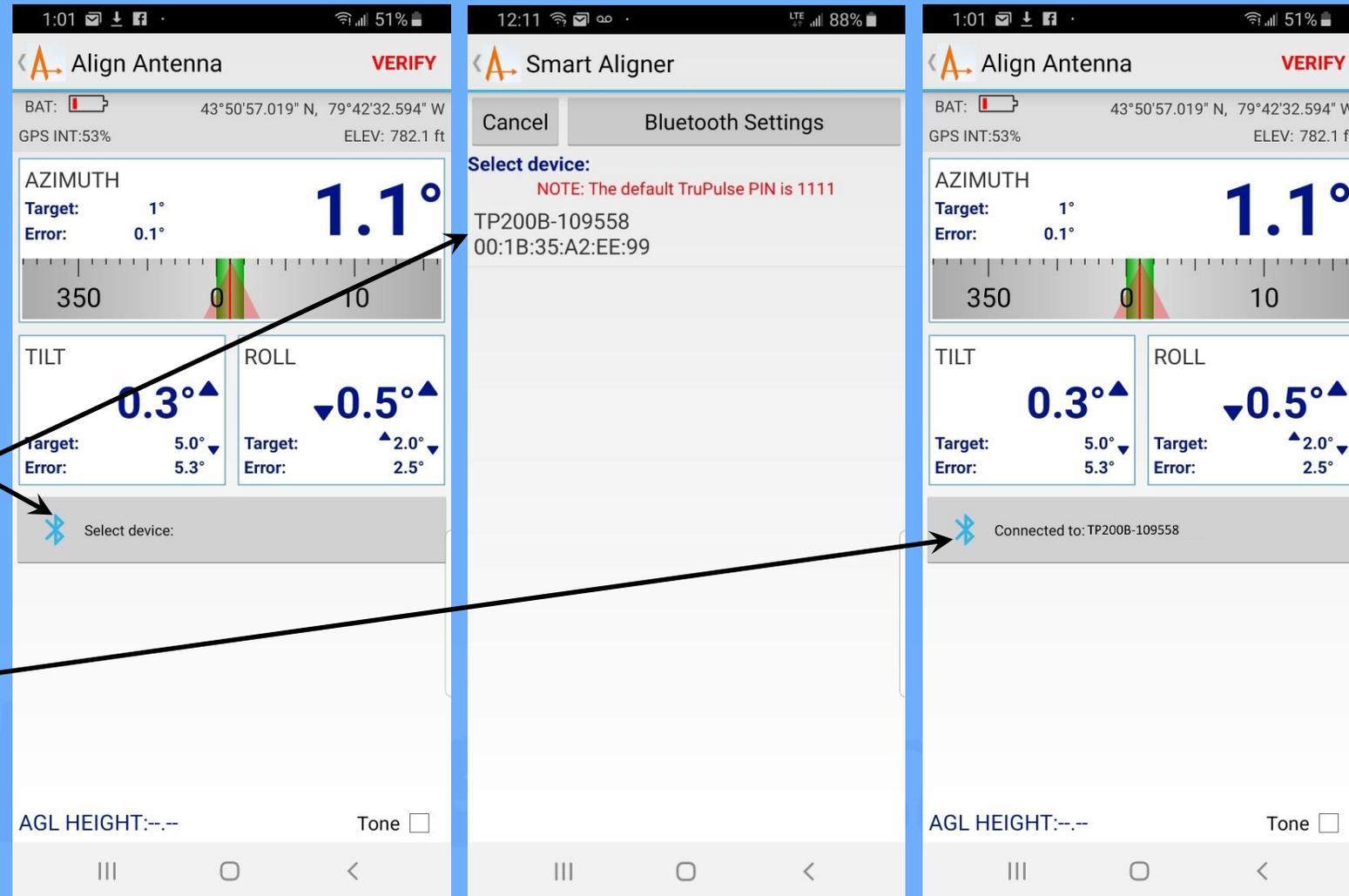
Laser AGL with Bluetooth (BT)

- When the PIN is accepted, the Laser will be Paired with your phone and it will appear in the Paired Devices list.
- Exit BT Settings and start the Smart Aligner app. Go to Settings and ensure that BT Rangefinder is enabled.



Laser AGL with Bluetooth (BT)

8. To take AGL measurements now and in the future, only follow these next steps.
9. Press *Select Device*.
10. Select TP200B-xxxxxx (Laser must be on).
11. Unit will show paired Laser name.



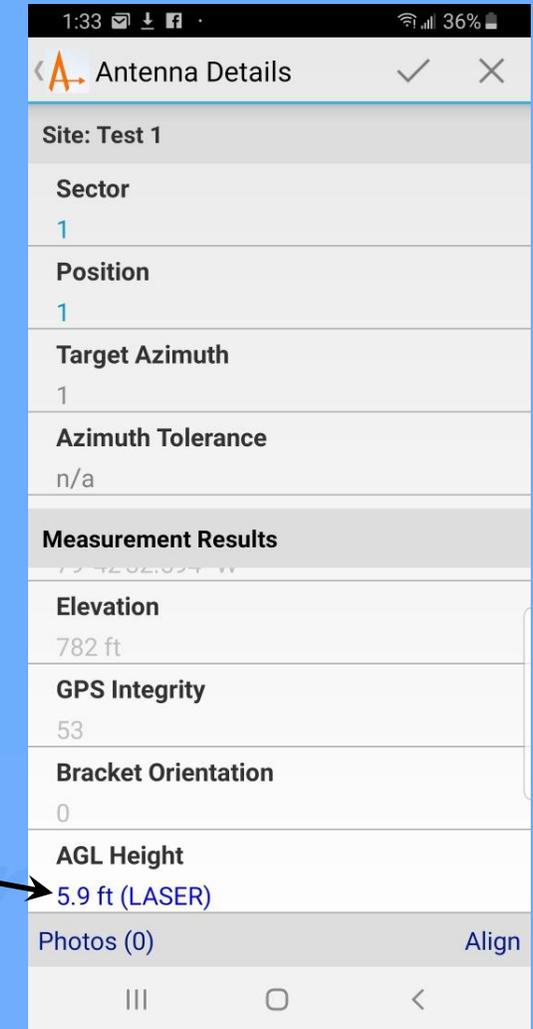
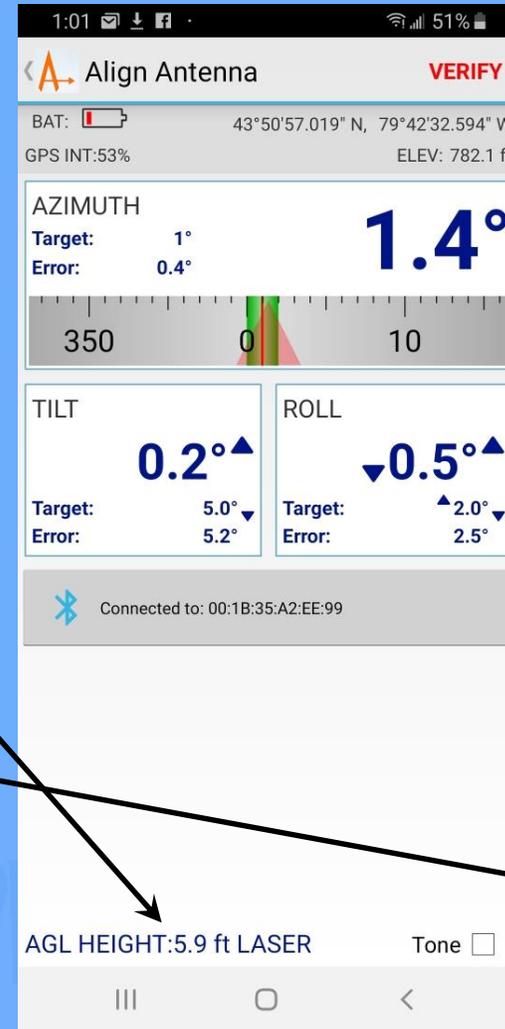
Laser AGL with Bluetooth (BT)

12. Hold the Laser at mid-height of the antenna and aim to the ground. The Laser does not have to be perfectly vertical, but it has to measure to an area at the same approximate elevation as the base of the tower.



Laser AGL with Bluetooth (BT)

13. Take the laser measurement when you are in the Measurement Screen of the app. The vertical distance of the measurement should appear in the lower left corner. Once Verified, the AGL Height is shown in the Measurement Results as 5.9ft (LASER). LASER means that it is automatically generated by the laser.



Course End

The logo for MultiWave Sensors features a stylized wave icon on the left, followed by the text "MultiWave" in a bold, italicized sans-serif font, and "Sensors" in a lighter, italicized sans-serif font.